

* SWBAT apply work, power, and energy as needed

Sep 6-2:31 PM

Welcome!!!

SECA Physics
Wednesday 1 December 2015

- * Pick up:
- slip of paper (for later)

H. Leslie Grebe

Opening Questions:

What do we measure with Watts? with Joules?

POWER

ENERGY

WORK

Algebra extra credit: (index card with name)

$$PE = mgh$$

$$KE = (1/2)mv^2$$

If an object starts at a certain height and then all the PE is converted to KE, how fast will it be going (what is "v")?

Centering...

Sep 7-7:04 AM

Catchy Physics Phrases

Work IS WHEN A FORCE CAUSES A DISPLACEMENT.

JOULES

Energy IS THE ABILITY TO DO WORK

JOULES

Power IS WORK OVER TIME

WATTS

$$\begin{array}{c} h = 5\text{m} \\ \downarrow \\ v = 10\text{m/s} \end{array}$$

Dec 5-7:14 AM

$$PE = mgh$$

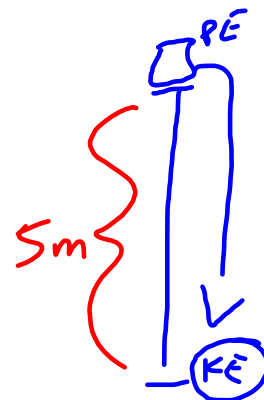
$$KE = (1/2)mv^2$$

If an object starts at a certain height and all the PE is converted to KE, how fast will it be going (what is "v")?

$$\begin{array}{c} PE_{\text{top}} = KE_{\text{bottom}} \\ m \cdot g \cdot h = \frac{1}{2} \cdot m \cdot v^2 \\ \frac{1}{2} \cdot m \quad \frac{1}{2} \cdot m \\ \sqrt{2 \cdot g \cdot h} \quad \sqrt{v^2} \end{array}$$

$$v = \sqrt{2 \cdot g \cdot h}$$

$$\begin{array}{l} v = \sqrt{2 \cdot 10 \cdot 5} = \sqrt{10 \cdot 10} \\ = 10\text{m/s} \end{array}$$



$$\begin{array}{c} h = 5\text{m} \\ \text{Worksheet} \\ v = \\ = 10\text{m/s} \end{array}$$

Dec 6-7:08 AM

Daily 3 Questions

- * Every day except test/project days
- * 3 Questions on the topics of the day
- * Main source of daily points
- * I am happy to give credit when I have no concerns about someone giving or getting help with the answers.

You can't get your points if you don't have your **NAME!!!**

Name	Period
1.	
2.	
3.	

Sep 9-7:32 AM

1. What is the **power** output of an engine that does 60,000 J of work in 10 seconds?

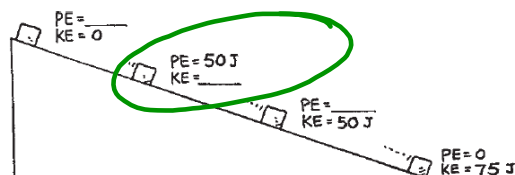
6000W

2. What value goes in the circle?

25 J

3. What is measured in Watts?

- A. Work
- B. Energy
- C. Power



Dec 2-7:55 AM